

I. AMENDMENTS

AMENDMENTS TO THE CLAIMS

Please enter the amendments to claim 3, as shown below.

Please enter new claims 26-30, as shown below.

1. (Original) A method of ameliorating a symptom of a prolactin receptor-related condition in a subject in need of such amelioration, comprising: administering to said subject a human growth hormone-based prolactin receptor antagonist and zinc in an amount effective to ameliorate said symptom.
2. (Original) A method of treating a prolactin receptor-related condition in a subject in need of such treatment, comprising: administering to said subject a human growth hormone-based prolactin receptor antagonist and zinc in an amount effective to treat such condition.
3. (Currently amended) A method of ~~preventing reducing the risk that an individual will acquire~~ a prolactin receptor-related condition ~~in a subject in need of such prevention~~, comprising: administering to said individual subject a human growth hormone-based prolactin receptor antagonist and zinc in an amount effective to treat such condition.
4. (Original) The method of Claim 1, 2, or 3 wherein the condition is breast cancer.
5. (Original) The method of Claim 1, 2, or 3 wherein the condition is selected from the group consisting of hyperprolactemia, breast cancer, mammary carcinoma, adenocarcinoma, lobular (small cell) carcinoma, intraductal carcinoma, medullary breast cancer, mucinous breast cancer, tubular breast cancer, papillary breast cancer, Paget's disease, inflammatory breast cancer, and hormone dependent tumors of the breast.
6. (Withdrawn) The method of claim 1, 2, or 3 wherein the condition is prostate cancer.
7. (Withdrawn) The method of claim 1, 2, or 3 wherein the condition is selected from the group consisting of benign prostate hyperplasia, adenocarcinoma, leiomyosarcoma, rhabdomyosarcoma, hyperprolactemia, and hormone dependent tumors of the prostate.
8. (Original) The method of claim 1, 2, or 3 wherein said antagonist is administered to a tissue with an effective local concentration of zinc.

9. (Original) The method of claim 8 wherein the tissue is breast tissue.

10. (Withdrawn) The method of claim 8 wherein the tissue is prostate tissue.

11.-15. (Canceled)

16. (Original) The method of claim 1, 2, or 3 wherein said antagonist and zinc are formulated in a sustained release formulation.

17. (Original) The method of claim 16 wherein said zinc is administered orally.

18. (Original) The method of claim 1, 2, or 3 wherein the zinc is ZnSO₄.

19. (Original) The method of claim 4 wherein said antagonist and zinc are administered in combination with chemotherapy, surgery, or radiation.

20. (Withdrawn) The method of claim 4, wherein said antagonist and zinc are administered in combination with estrogen receptor antagonist or HER-2 receptor antagonist.

21. (Withdrawn) The method of claim 5 wherein said condition is hyperprolactemia and said antagonist and zinc is administered in combination with a dopamine agonist.

22. (Withdrawn) The method of claim 6 wherein said antagonist and zinc are administered in combination with radiation, surgery, or an androgen receptor antagonist

23. (Withdrawn) The method of claim 7 wherein said condition is benign prostate hyperplasia and said antagonist and zinc is administered in combination with an adrenergic receptor antagonist, an adrenergic receptor agonist, or an androgen receptor antagonist

24. (Withdrawn) The method of claim 7 wherein said condition is hyperprolactemia and said antagonist and zinc is administered in combination with a dopamine agonist.

25. (Withdrawn) A pharmaceutical composition comprising a human growth hormone-based prolactin receptor antagonist and an effective amount of zinc.

26. (New) The method of claim 1, 2, or 3, wherein the human growth-hormone-based prolactin receptor antagonist is a human growth hormone comprising a single amino acid substitution selected from F10A, N12A, L15A, R16A, E17A, R19A, D26E, F54A, S55A, E56A, S57A, P59A R64A, R64K, E65A, E66A, Q68A, Q69A, K70A, S71A, L73A, G120R, G120W, Y160A, Y164A, D171A, T175S, I179A, I179M, V180A, Q181A, R183A, S184A, V185A, E186A, G187A, and S18A.

27. (New) The method of claim 1, 2, or 3, wherein the human growth-hormone-based prolactin receptor antagonist comprises E56D/R64M or F176Y/I179T amino acid substitutions.

28. (New) The method of claim 1, 2, or 3, wherein the human growth-hormone-based prolactin receptor antagonist comprises I4A/L6A/G120A, I41/L6A/G120A/T123A, F1A/I4A/G120I/T123A, F1A/I4A/G120F, or F1T/I4F/L6R/G120R/T123D amino acid substitutions.

29. (New) The method of claim 1, 2, or 3, wherein the human growth-hormone-based prolactin receptor antagonist comprises
Y11V/L113I/K115E/D116Q/E118K/E119R/G120L/Q122E/T123G/G126L/R127I/E129S,
N12R/M14V/L15V/R16L/R19Y, H21A/R64K/E17A/G120R, K41R/Y42R/L45W/Q46W,
K41R/Y42Q/L45W/Q46W, K41I/Y42H/L45W/Q46W, K41R/Y42R/L45W/Q46W,
K41I/Y42H/L45W/Q46W/F54P/R64K, Q46H/N47D/P48S/Q49E/L52F, P48A/T50A/S51A/L52F,
F54H/S55T/E56S/I58L/P59A/S62E/N63D/R64K/E66Q/T67A/K70M/S71N/N72Q/L73K/E74D,
F54P/E56D/I58T/R64K, F54P/E56W/I58T/R64K, E88G/Q91Y/F92H/R94T/S95E, and
F97R/A98G/N99M/S100Q/L101D/V102A/Y103P/G104E amino acid substitutions.

30. (New) The method of claim 1, 2, or 3, wherein the human growth-hormone-based prolactin receptor antagonist is attached to poly(ethylene glycol).